

AGRiVIEW



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Apply Now for Spring Farm Agronomic Practices

By Annika Fuller, VT Agency of Agriculture, Food & Markets

The VAAFM Farm Agronomic Practices (FAP) Program invests state funds in soil-based agronomic practices to improve soil quality, increase crop production, and reduce erosion and surface runoff from agricultural fields. Grant applications are currently open for spring conservation practices planned to be installed prior to June 30, 2023, such as manure injection (\$25/acre), conservation tillage (\$15/ac), no-till pasture and hayland renovation (\$20/ac) and rotation of cropland into hay (\$35/ac, or \$45/ac if a nurse crop is used).

Funding is limited and available



on a first-come-first-served basis, so apply now! Applications are due at least 30 days prior to implementation for all spring conservation practices. We recommend that farmers plan as far

Reduced tillage planting systems reduce soil disturbance, improve organic matter, and help reduce nutrient runoff from agricultural fields.

ahead as possible for implementation of agronomic practices, especially when seeking financial assistance.

There is a maximum annual funding cap of \$8,000 per farm operation from July 1, 2022,

through June 30, 2023. If your farm operation has received the \$8000 cap for fall 2022 grazing or cover cropping, then the operation is not eligible to receive any additional spring 2023 FAP payments. Applications for Fall 2023 grazing and cover crop are not yet open, but will be due June 15 for rotational grazing and August 1 for cover crop.

Additional financial assistance for conservation practices are available through the federal USDA-NRCS Environmental Quality Incentive Program (EQIP). EQIP consistently provides higher payment rates per acre of conservation practice, so we encourage farms to apply to EQIP before FAP, if feasible.

Farm operations that meet the

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Vermont Agency of Agriculture, Food & Markets

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Planting, Growing, and Nurturing New Ideas, Fresh Outcomes

As spring approaches, farmers are cultivating seedlings while the Legislature starts to wrap up their work in Montpelier. There will be a flurry of activity; some proposals will grow into law, but many will not. As these bills unfold, the agriculture community has presented a proposal to lawmakers. This initiative, contained within the Governor's budget, would make significant investments in Vermont's produce, meat, and maple industries.

This one-time \$10 million dollar appropriation will allocate funding to the Vermont Agency of Agriculture,

Food & Markets to provide competitively awarded grants. This support will be directed toward small and mid-sized agricultural producers and value-added processors in the meat, produce, and maple sectors, which remain under-resourced or ineligible for most currently available programs. At the same time, these industries are poised for growth and add diversity to Vermont's agricultural landscape and economy.

The proposal supports one of the core focus areas of the Governor's Future of Vermont Agriculture Commission. The group focused on leveraging economic development, supporting strong local food systems, and investing in the success of the next generation of Vermont farmers and agricultural entrepreneurs. Grants could include expanding slaughter and processing capacity

for meat and poultry. Grants could support of post-harvest handling, processing, and distribution for fruits, vegetables, and grains. Grants will also focus on increasing capacity and production for value-added and new maple products. All these sectors will grow when backed by greater investment.

The Vermont agriculture community is also working with lawmakers to champion an initiative to support Vermont's Working Lands Program. The Governor has proposed investing \$4 million dollars in this successful program this year. We believe it is critical to continue to invest in those who make their

living off the land, on the farm or in the forest. This initiative, working in tandem with funding for the meat, produce, and maple sectors, deliver a total investment of \$14 million dollars for growing Agriculture economy.

Now is our time to invest in our farmers and producers. They feed us and contribute to our rural economy. As the spring unfolds, we will continue to advocate for these proposals and ultimately, Governor Scott's action to create new laws to support Vermont agriculture. Here's to planting, growing, and nurturing new ideas and fresh outcomes in the spring of 2023.

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This Month's Recipe

Baking Powder Biscuits

This versatile and easy recipe can be used as a base for meals and desserts. We love them topped with berries and whipped cream, as a main course smothered in turkey and gravy, or just eat them solo. Makes about 12 - 2 inch biscuits.

Ingredients

1/3 cup butter
2 cups flour
2 TBSP sugar
1 TBSP baking powder
1 tsp salt
3/4 cup milk

Directions

Heat oven to 450.



Using a stand mixer (or by hand with a pastry cutter), cut shortening into dry ingredients until

the mixture resembles fine crumbs.

Stir in milk just until blended (if using the stand mixer, stop mixing once the ball is formed). Gently smooth dough into a ball on a lightly floured surface.

Knead the dough about twenty times if mixed by hand, about 7 times if using the stand mixer.

Roll dough to 1/2-inch thickness, cut with 2-inch cutter and place about one inch apart on an ungreased cookie sheet. Repeat until all dough is used.

Bake until golden brown, 10 - 12 minutes. Enjoy!

Anson Tebbetts,
Secretary, Agency of Agriculture, Food & Markets

Farm Stress in Relation to Spring

By Juana Lopez, VT Agency of Agriculture, Food & Markets

The spring season can be one of the most beautiful times one can experience in the green mountain state. It can also bring new levels of stress and worry, especially for farmers. This is due to the soil preparation, seeding and planting period being one of the most time sensitive and critical tasks for a farmer to ensure the success of their business. In just a few short weeks, farmers must be able to plan and plant certain crops during the proper planting season window based on the local conditions, including temperatures and weather that permit seeds and plants to be sowed or transplanted into the ground. During this time, the farmer must also ensure that they have sufficient labor, and all their equipment will operate smoothly, often after having sat unused for many months. A farmer can work many long days to prepare for this important planting season in order to ensure a good crop and bountiful harvest.

One can try to avoid dealing with their stress levels during this time period in response to ideal weather conditions or in order to complete a project or timely job that need to get done on the farm.

Some of these examples include but are not limited to:

- Denying there is a problem
- Putting blame on others
- Withdrawing from family, friends, or partners
- Using unhealthy resources (alcohol, binge eating, spending sprees) to cope with stress

What this means is that farmers need to find ways to help alleviate their stress burden. Farm First, a free Vermont-based program tries to tackle these issues by providing farm owners with confidential and

personal services that best suit their needs, including, but not limited to, financial or family concerns, illness, depression, or alcoholism. One possible opportunity available is to speak to a farmer who is part of the farmer peer network who may also be participating in the planting season with a similar situation as you. Simply talking to other peers in the same position can make a

difference. These peers can help you come up with a plan to take a break between tasks or identify a better way to deal with your stress.

It's important to ask for help when needed.

Contact Farm First if you have any questions or concerns at 802-318-5538. Let's support each other this season!

To connect with a farmer peer,

please visit: <https://farmfirst.org/resources/peer-support>

For more information, please visit: <https://www.farmfirst.org/>
<https://www.ndsu.edu/agriculture/extension/publications/farm-stress-fact-sheet-stress-symptoms#:~:text=When%20experiencing%20farm%20or%20ranch,churning%20stomach%20or%20excessive%20fatigue.>



Last Chance! Applications Due April 7th for Free Agriscience Summer Academies at UVM

UVM Extension's 4-H Program invites rising 8th-12th graders to apply for one of three, free, residential summer academies held on the UVM campus June 25-30. AgroTek Innovation, now in its second year, exposes students to agriscience innovation skills by diving deep into one of three topics; Culturing Cells for Healthier Soils, Shifting the Waste to Value Paradigm (converting agricultural waste into value added products), and Using Virtual Reality for More Precise Agriculture.

In addition to learning content, participants will build important relationships with undergraduate student mentors along with faculty and staff. More details, including the link to apply, can be found at <https://www.uvm.edu/extension/youth/agrotek-innovation-program-8th-12th-graders>

Deadline to apply is April 7, 2023. Contact Sarah Kleinman at sarah.kleinman@uvm.edu or 802-651-8343 x521.

DAIRY BUSINESS INNOVATION CENTER

Got GOAT Milk?

By Katie Spring, Northeast Dairy Business Innovation Center

“Goat milk isn’t weird. Goats kind of are!” That straightforward yet playful sentiment is what you’ll find on the new Oak Knoll Dairy website. And the couple behind the milk would know – Ryan Andrus and Annie Rowen tend to 500 goats on Bridgman Hill Farm, a goat dairy that supplies all the milk for the Oak Knoll label.

In 2022, Oak Knoll Dairy got a brand overhaul thanks to a Dairy Marketing and Branding Services grant from the Northeast Dairy Business Innovation Center (NE-DBIC). The new branding not only updated the labels and website graphics, but also wove together the story of Ryan and Annie, who started Bridgman Hill Farm in partnership with Jasper Hill Farm, before taking over the 30-year-old Oak Knoll brand when its founders retired.

“Since receiving the NE-DBIC grant and subsequently rebranding the Oak Knoll Dairy bottles, sales have increased by 75% in terms of total milk volume bottled weekly,” said Leigh Falzone, an account manager with Bridgman Hill and Jasper Hill Farm.

“The grant allowed us to execute in-depth market research, a brand identity study, and a full re-design of all branding assets in order to launch the rebranded



bottles. We took a close look at which attributes, health benefits, and key words would resonate with customers, and tested several design concepts until we

found the one that spoke to our brand’s values and personality,” Leigh said.

The positive feedback from retailers, distribution partners, and consumers has

been overwhelming. In the second half of 2022, Oak Knoll was able to increase sales after supply shortages on the West Coast caused buyers to look for new options.

“We believe the beautiful new bottles and clear messaging on the labels aided in the ease of that customer transition and the superior freshness and quality of milk has kept them with Oak Knoll since,” Leigh said. “We were so grateful to be in the right place at the right time with our product to take advantage of the opportunity to gain new customers.”

As 2023 gets underway,

Oak Knoll continues to work on diversifying their distribution channels as they explore expanding their reach to get goat milk into the hands of more customers. After all, goats may be weird, but goat milk is delicious.

Visit their website to see the full Oak Knoll rebrand: oakknolldairy.com

The Dairy Marketing and Branding Services grant will re-open in April 2023. Learn more about this funding opportunity here: agriculture.vermont.gov/dbic/grants/dairy-marketing-branding-services-grant

Announcing the On-Farm Milk Storage & Handling Grantees

By Katie Spring, Northeast Dairy Business Innovation Center

The Northeast Dairy Business Innovation Center is pleased to announce 23 recipients of the On-Farm Milk Storage & Handling Grant. These funds allowed farmers to purchase and install specialized equipment including larger bulk tanks, plate coolers, glycol chillers, and pipeline systems, which lead to savings on hauling costs, decreased fuel usage, and increased energy efficiency.

In one of the most com-

petitive rounds we’ve seen, over 175 farms applied for the grant. With such a clear need for storage and handling funding across the region, NE-DBIC will offer a similar grant in fall of 2023. Awards in this round ranged from \$20,000 – \$50,000, with just over \$1,005,000

awarded.

On-Farm Milk Storage & Handling Grantees include two farms in Vermont:

- **Bedrock Farms** will install milk cooling and heat recovery systems to cool milk more quickly and efficiently, leading to increased milk quality and

- reduced farm energy costs.
- **Mystiq Heights** will replace a small buffer bulk tank with a 5,000-gallon bulk tank in order to create an automated two-tank system that will improve milk quality and efficiency and allow them to move to every-other-day milk pickup.

Farmers in Connecticut, Delaware, Maine, Maryland, Massachusetts, New York, and Pennsylvania also received awards. For information on upcoming grant rounds, visit our website: agriculture.vermont.gov/dbic





Northeast Dairy Business Innovation Center Grants

Dairy Processor Expansion Grant

Dairy Processors across the Northeast can apply for funding to purchase specialized equipment that will allow them to increase processing capacity through volume expansion and existing product line expansion. With a focus on expanding the utilization of regionally sourced milk, this grant offers a total of \$12 million spread across 3 Tiers of funding to support processors at a variety of sizes.

Processors who fall into Tiers 1 and 2 will go through a multi-stage application process, with a pre-application due by May 11.

Tier 3 processors will be invited to fill out a single-stage application, with an expected application period between June and August.

A Request for Applications for all Tiers is available on our website: agriculture.vermont.gov/dbic/grants/existing-dairy-processor-expansion-grant

Dairy Marketing & Branding Services Grant

The Dairy Marketing and Branding Services Grant Program is re-opening to established value-added dairy processors and producer associations on April 11.

With funds to access professional marketing and branding services, this grant helps value-added processors increase the exposure and promotion of regionally produced dairy products through support from marketing and branding professionals.

Awards will range from \$10,000 - \$50,000 with a match requirement of 25%. Additionally, up to 25% of the grant funds may be used to implement the strategy and/or content developed by the contractor.

Learn more on our website: agriculture.vermont.gov/dbic/grants/cohort-dairy-technical-assistance-contract

Dairy Farm Cohort Technical Assistance Contract

The NE-DBIC seeks Requests for Proposals for Dairy Farm Cohorts, our innovative approach to Technical Assistance.

Interested contractors may submit a proposal to offer cohort-based TA for dairy farmers in one

or more of these areas: increased grazing quality or quantity, home-grown forage enhancement, alternative herd management, innovative staffing and business management, and marketing and education of dairy production practices.

Contractors will have the flexibility to work with dairy farmers of any scale, type of

dairy animal, certification status, and current condition of the farm. Contracts will be issued for up to \$150,000. Total funds available \$500,000.

The Request for Proposals will be available on our website on April 11: agriculture.vermont.gov/dbic/grants/cohort-dairy-technical-assistance-contract

Farm Agronomic Practices

continued from page 1

threshold for the Required Agricultural Practices and are in good standing with water quality regulations are eligible to apply for the specific practice or practices that they intend to implement. However, farms are ineligible for duplicative payments: farms cannot apply for or receive FAP payment for the same

conservation practice(s) on the same field(s) funded under another state or federal agreement.

For more information on the FAP program, the payment rates for each practice type, and to apply online, go to <http://agriculture.vermont.gov/fap>.

If you have specific questions about practice eligibility, or how the FAP program works, you can contact Sonia Howlett at 802-522-4655.

Reminder! 2023 Scale Testing Dates and Locations

By Marc Paquette, VT Agency of Agriculture, Food & Markets

The Weights & Measures Section of the Agency of Agriculture, Food and Markets will be hosting multiple scale inspection events around the state during April for anyone who uses scale(s) at farmers' markets or farm stands to sell produce or other commodities. This testing is required by law.

Please plan to attend one of the inspection events listed below. Bring your legal for trade scale, and any accessories that you use with it for weighing items for sale. Come anytime during open hours, no advance appointment is necessary. The test should take 5 to 10 minutes per scale.

Questions call the Weights & Measures/Consumer Protection office at 802-828-2426

Full Day Locations: 9:00 am – 2:00 pm

Date	Location	Address
5 April	AOT - Bennington	359 Bowen Road, Bennington
6 April	AOT - Dummerston	870 US Route 5, Dummerston
7 April	AOT - Windsor	1640 US Route 5 North, Windsor
11 April	AOT - Chimney Corners-Colchester	400 US RTE 7, Brentwood Drive, Colchester
19 April	AOT - Clarendon	1628 Route 7B, Clarendon
20 April	AOT - Derby	4611 Route 5, Derby
21 April	AOT - St. Johnsbury	1068 US Route 5, St. Johnsbury
26 April	AOT - Middlebury	341 Creek Road, Middlebury
2 May	Vermont Ag & Env Lab/Weights & Measures Lab	163 Admin Drive, Randolph Center (VTC Campus)

Half Day Locations: 9:00 am – 12:00 pm

Date	Location	Address
5 April	AOT - Central Garage	1716 US-Route 302, Berlin
18 April	AOT - Morrisville	643 Brooklyn Street, Morrisville

VERMONT AGRICULTURE & FOOD SYSTEM PLAN 2021 – 2030: Agriculture & Food Policy

Editor's note: This brief is part of the Vermont Agriculture & Food System Plan 2021-2030 submitted to the legislature in January 2021. To read the full plan, please go to <https://agriculture.vermont.gov/document/vermont-agriculture-and-food-system-strategic-plan-2021-2030>



NOTE: This brief reflects conditions before the economic crisis brought on by the COVID-19 pandemic.

Lead Author: Kyle Harris, VT Agency of Agriculture, Food & Markets

Contributing Authors: Erica Campbell, Office of Senator Sanders; Maddie Kempner, NOFA-VT; Jackie Folsom, Vermont Farm Bureau; Caroline Gordon, Rural Vermont.

What's At Stake?

Public policy is generally described as a system of laws, regulatory measures, courses of action, and funding priorities concerning a given topic, promulgated by a government entity or its representatives. Existing agriculture and food policy in Vermont seeks to strike a balance between farm viability, maintaining the working landscape, and protecting environmental and public health. It is critical that Vermont's food and agriculture policies continually evolve to best support food and farming systems that benefit the public

at large, while allowing Vermont agricultural and food producers to live healthy lives, produce high-quality food, and operate thriving businesses in their communities.

Current Conditions

Agriculture and food policies govern a wide range of issues, opportunities, and conflicts. These include public health and private land use considerations, and myriad environmental concerns such as decreasing erosion and preserving water quality, reducing the use of harmful chemicals in agricultural systems, and improving agricultural practices to reduce greenhouse gas emissions.

Policy can also foster transparency in supply

chains, promote equitable food access, impact subsidy allocations and food labeling, and resolve labor and trade disputes. The federal farm bill governs policies and programs related to farming, food and nutrition, and rural communities. Over the past several decades federal policy has led to massive consolidation within agricultural industries, loss of farmland, and the hollowing out of* rural communities in Vermont and across the country.

During the same period, the public's interest in food and agriculture policy has risen as the organic and local food movements have successfully shifted public preferences in favor of local food production, transparency, and quality over convenience, quantity, and shelf life.

While Vermont producers' values have been in general alignment with these public preferences for decades, Vermont state agencies are challenged to apply federal policies, designed to address large-scale industrialized agriculture models, to the scale and diversity of Vermont's producers.

Bottlenecks & Gaps

- The state does not have a clearly articulated set of values and goals guiding its policy decisions around food and agriculture.
- Despite strong local and state public participation requirements for development of food and agricultural regulations, most citizens, including farmers, have limited time for, ability to, and/or interest in giving input.
- Consolidation within agriculture, and corporate lobbying efforts, often lead the federal government to prioritize large agricultural interests over small producers and family farms.
- Agriculture is often perceived through examples of its bad actors, instead of through its innovative successes and integral role in solving climate change and other environmental issues.
- State policy initiatives have not ensured that farm families are supported with basic life needs such as health care and child care, an issue highlighted when the COVID-19 pandemic added pressure on farmers to maintain a stable local food supply.

Opportunities

- Many Vermont producers support practical and innovative approaches that secure public goods like clean water, healthy soil, thriving communities, and healthy people.
- Vermont's strong state-level governmental and legislative bodies emphasize public participation in food and agriculture policies.
- Use Value Appraisal (aka Current Use), scale-stratified regulations built into Required Agricultural Practices (RAPs), Act 250, and other state policies are a solid foundation for a comprehensive policy framework.
- Vermont's agricultural businesses have demonstrated the ability to utilize new technologies and methods, creating co-benefits that improve food production, health, environmental sustainability, and climate mitigation/adaptation.
- Vermont's small population base and participatory government culture allow both private and public sector perspectives to form the foundation of policy initiatives.

Recommendations

- It is important for policy makers and others to prioritize farmers' mental health via programs and educational events. Trade wars, climate change, depressed commodity prices, and labor issues, all beyond Vermont farmers' control, impact farm viability and hence farm-





- ers' physical and mental health. (see Health Care brief)
- Provide at least \$1.5 million in funding annually to the Working Lands Enterprise Fund, which provides strategic grant funds to strengthen innovative farms and food businesses.
- Fund Vermont Housing and Conservation Board's Farm & Forest Viability Program annually with \$3 million from the Property Transfer Tax Fund, in order to expand its capacity to provide critical business and technical assistance services to farms and forest products businesses of all types across Vermont.
- Invest in the development and implementation of innovative mechanisms, such as payment for ecosystem services, which strike a balance between public benefit and farm viability (see Payment for Ecosystem Services brief).
- Develop policies that support adaptation to new business models, with triple-bottom-line benefits, and incentivize innovation, value-added production, and infrastructure support for Vermont's agricultural community.
- The Vermont Agency of Agriculture, Food and Markets, in partnership with agriculture and food policy stakeholders, should build a comprehensive and fully aligned state-level agricultural policy road map. This could include an annual review of existing and proposed new policy objectives before each state legislative session to ensure policy decisions compliment each other, and to balance reactive and proactive programs. Such a roadmap could also allow for more public participation at multiple points throughout the policy development process.

New Egg Labeling Guide Helps Producers Correctly Label Eggs

By Tucker Diego, VT Agency of Agriculture, Food & Markets

Recently it seems like our office has received more calls from people interested in keeping hens and selling chicken eggs than ever before.

Perhaps the increase in egg prices has encouraged people to raise their own chickens and sell the surplus eggs. Or perhaps the trend

started earlier when during the pandemic consumers couldn't always rely on fully stocked shelves at grocery stores. Either way, there are now numerous small scale egg operations starting up across the state. This prompted our Division to develop a new resource for producers called the *Vermont Shell Egg Labeling Guide*.

For those who are starting a new egg operation or

have an existing operation but have questions about labelling, this guide was made for you. Download the Guide at <https://agriculture.vermont.gov/document/vermont-shell-egg-labeling-guide>.

Below are several questions to test your egg labeling knowledge. Answers are provided below – or better yet, look up the answers in the guide itself.



Hens enjoying a new mobile chicken house at Shelburne Farms. Most egg operations in Vermont have fewer than 50 laying hens (source: Vermont Agriculture and Food System Strategic Plan: 2021-2030).

True or False:

- 1) Every egg carton must be labeled with the egg color.
- 2) Egg producers do not require a license to operate in Vermont.
- 3) The official egg grades are Grade AA, Grade A, Grade B, and Ungraded or Nest Run.
- 4) Eggs must be washed before being sold.
- 5) Egg cartons may be reused as long as they are clean, structurally sound, and any previous markings have been crossed out or covered up.

- 1) False. Color is an optional labeling requirement. Many labels include the egg color because consumers often prefer one color over another.
- 2) True. Unlike in other industries like dairy and meat, egg producers are not required to be licensed with the Agency. We still enjoy hearing from new producers and are always happy to answer questions.
- 3) False. "Ungraded" and "nest run" are not official grade terms for eggs sold in retail containers. The only official grade terms are Grade AA, Grade A, and Grade B. The quality standards for each grade can be found in the Vermont Fresh Egg Regulations (a link is provided within the Guide).
- 4) False. Vermont does not require eggs to be washed, however, eggs must be visibly clean and unbroken. Eggs must also meet the quality standards associated with each grade, where Grade AA allows for the fewest defects, and Grade B allows for slightly more.
- 5) True. Reused egg cartons are allowed but producers must make sure previous markings have been crossed out or removed to prevent misbranding.

Vermont Livestock Slaughter and Processing Strengthens Vermont's Meat Supply Chain Through Working Lands Grant

By Scott Waterman, VT
Agency of Agriculture, Food & Markets

Vermont Livestock Slaughter and Processing's (VLSP) mission is to provide quality service in the food industry, and to strengthen and protect the reputation of high-quality products from Vermont that are regularly sought by consumers," stated Carl Cushing, owner of the long-time business in Ferrisburgh. "The reason why we do the work that we do extends beyond the walls of our facility – being able to help producers reach diverse markets contributes to their business' viability and opportunity for growth." With the \$100,000 Working Lands investment they received in 2022, VLSP looks to increase their capacity to serve an industry shortfall in Vermont for slaughter and meat processing.

"The Working Lands grant is directly supporting our business by helping us upgrade our facility to have more efficient, sustainable, and reliable equipment," Cushing said. "The equipment we have selected for our facility will not only improve the work environment but will also allow us to provide more value-added product options to the producers we work with. We will be able to produce value-added products that are neatly packaged and labeled



Aerial view of expansion of VLSP facility in Ferrisburgh

for grocery stores; and the equipment will also help us provide the local school district with more locally

grown, humanely raised, and antibiotic free ground beef patties for students' lunches." When the Covid-19



Ryan Cushing of VLSP.

Steve James, Addison Independent

pandemic hit in 2020, the resulting strain on the local food system forced a number of meat processing businesses to close, making an already challenging landscape in Vermont for these services even more difficult. Cushing hopes to set a new bar for what a small, local service provider can do for our local food system.

"The COVID-19 pandemic forced many meat processing facilities to close, leaving producers with nowhere to process their meat and creating a gap between producers and consumers. The pandemic highlighted flaws in the U.S. meat system including our reliance on large, corporate processing facilities. Our small facility is a key link between working lands businesses that are growing our food and consumers. We hope to be an example of

a small, local, and resilient business in the food system."

VLSP is one of only seven USDA-inspected meat slaughter & processing businesses in Vermont. This type of facility is needed for any producer that would like to sell their product across State-lines. With the Working Lands investment, VLSP hopes to grow its ability to adapt to the needs of Vermont's food industry.

"In the near-term we are excited to recruit for new long-term employment opportunities while also retaining current employees.

Demonstrated by the pandemic, there is a clear and pressing need for resilient, distributed food processing infrastructure in Vermont and throughout the United States," said Cushing. "As a small facility in a safe, accessible location in a climate-resilient state, maintaining and increasing our services at VLSP will provide healthy food to Vermonters and our surrounding states in the face of emergencies while continuing to support the livelihoods of our customers."

"When we all work together to strengthen our food system, our communities thrive," Secretary Tebbetts said. "It's apparent our friends at VLSP feel the same, and we thank them for their commitment to Vermont."

To watch a video highlight of VLSP, visit workinglands.vermont.gov/blog/vlsp

VAAFM and NRCS Work Together to Help a Farm

By: Annika Fuller, VT Agency of Agriculture, Food & Markets

Woodnotch Farm, run by Loren Wood, his wife and their four sons, milks around 1000 cows on two separately permitted farm operations. Before this year, they had a nearly two-acre feed bunk facility on one of their operations that had an insufficient silage leachate collection system. In 2022, however, they remedied this issue by completing a liquid Waste Storage Facility project with joint funding from the Environmental Quality Incentives Program (EQIP) from the USDA Natural Resources Conservation Service (NRCS) and the Best Management Practices (BMP) grant from the Vermont Agency of Agriculture, Food and Markets (VAAFM).

The old vegetated treatment system for silage leachate was causing the storm runoff to overload a small Vegetated Treatment Area with nutrients. Additionally, since the low flow tank did not have an automatic pump system, “the farm would have to go down there with a tractor and pump out the tank every so often. Which wasn’t a very feasible option,” said Jason Bradley, the State of Vermont BMP Engineer that helped the farm with the project. If the low flow tank overflowed, it had the



Satellite picture of the Woodnotch Farm feed bunk facility before the EQIP & BMP project.



A satellite view of The Woodnotch Farm feed bunk facility after the EQIP & BMP project.

potential to flow into a small stream below the feed bunk, and from there into Lake Champlain.

Wanting to address the situation before matters worsened, Woodnotch reached out to George Tucker, a soil conservationist with NRCS.

When farmers such as Wood reach out to NRCS about infrastructure projects, “[we are] pretty honest about whether farmers should go for one funding program alone or if it’s going

to be large and expensive then they can tie the state and the federal programs together,” Tucker said.

When Tucker assessed the site, he recommended pairing EQIP with the State’s BMP program to cover more of the cost than EQIP or BMP could alone. For BMP-only projects, funding cannot exceed \$100,000. But for EQIP projects, BMP can contribute up to \$200,000 on top of an EQIP maximum of \$450,000 for each Farm

Bill. Combined, these two programs can fund up to \$650,00. At a total construction cost of less than \$150,000, the Woodnotch project was not nearly this costly, but while EQIP was only able to cover 67% of the construction cost, BMP was able to “cover the gap” and contribute an additional 23%. Combined, EQIP and BMP were able to fund the project at the 90% level.

For Woodnotch’s project, Bradley was able to represent both the federal EQIP program and the state BMP program, ensuring that cooperation between the two funding programs was smooth. In other parts of the state, the BMP engineer may only act to administer BMP funding, while an EQIP engineer will provide primary technical design on the project.

With the help of the two programs, Woodnotch Farms was able to expand their Waste Storage Facility to around seven times its original size, so it can now hold all the silage leachate and contaminated runoff from the feed bunk complex.

This type of waste collection project “gives the farmers flexibility to deal with their waste when it is convenient for them and also when it is the right time for the field to absorb those nutrients,” Bradley said. And while it has helped the farm’s daily management not have to constantly monitor and pump out leachate from

the tank in order to avoid overflow and runoff, it also allows the farm to comply with state requirements. “The state is strict with their rules, as they should be, but this is one less thing that our farm will have to worry about,” Loren Wood said.

Completing projects with help from both EQIP and BMP can be convenient and can cover a much higher percentage of costs than either program alone. However, Tucker says there are some things farmers need to make sure of when using these two different programs together. He recommends that farmers have a good estimate from the start and ensure that all their questions are asked and answered before the project begins on the ground. Then, once the project is approved, bills and hours need to be well tracked.

With these things in mind, EQIP and BMP coordinated projects have a high potential to improve farm operations. “At the end of the day, we are really glad we did this project,” Wood concluded.

To apply to EQIP contact your local USDA NRCS service center (<https://www.farmers.gov/working-with-us/service-center-locator>). For more information about the state BMP program and to apply, visit <https://agriculture.vermont.gov/bmp>. BMP applications for the 2023 season should be submitted by April 1.

VERMONT VEGETABLE AND BERRY NEWS



Compiled by Vern Grubinger,
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Extension
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vernon.grubinger@uvm.edu
www.vvbg.org

Reports From The Field

(Guildhall) The weekly grind of paperwork and moving potatoes all over New England continues. The taxes are done, crop plan and seed orders are done. All that remains is some equipment repair, debt service, and selling the last 500k of potatoes. We had a high incidence of hollow heart in gold chefs in most of our fields this year. To try to correct for this I've finally hired an agronomist to help balance our soils, and do weekly tissue sampling in season; I'm pretty stoked on it. Our 2023 crop plan has got us increasing the number of varieties we grow again, after trimming that number the last several years.

(Westminster West) No supply issues so far. Soil mix, compost, pots, trays and seed have arrived in a timely manner. Shipping costs are up! Storage potatoes holding up fine as is garlic, but almost out.

Soil test from tunnels sent off, thanks for the reminders! For some strange reason, we are expanding

vegetable production this year in potatoes, winter squash, celery and garlic. Labor is the big driver for changes as well as margins and demand. Overall crop expenses were up last year and controlling costs will be my biggest problem this year and may need to hold off capital expenditures such as well drilling and new equipment, do I really need a new tractor? Tomatoes and early seedlings are up and running already in the propagation house and I'm actually excited by this year's prospects, onward!

Updates From UVM Extension Agricultural Engineering

Chris Callahan and Andy Chamberlin

Many winter storage crops love high humidity and low temperatures. Others like low humidity and warmer temperatures. It can be a real challenge to achieve the right balance. As we make air cooler, it holds less water vapor so the difference between high humidity and condensation (rain) becomes less and less. It is not uncommon to run into either overly dry conditions or condensation on walls and ceilings. What's going on here? And what can we do about it? Check out our new blog post that dives in to this topic: <http://go.uvm.edu/humidity>

New Blog Post: Duijndam Machines – Used Equipment from Europe. <https://go.uvm.edu/duijndam>

New Podcast Episode: Renovating a Barn to Sustain Indian Line Farm: EP4. <https://thefarmersshare.com/2023/02/07/renovating-a-barn-to-sustain-indian-line-farm-ep4/>

Recorded Grower Webinars – Spring 2023

If you missed these live webinars held in February and March, check out the recordings posted at here, and on the Vermont Vegetable and Berry Grower Association's YouTube Channel at <https://www.youtube.com/playlist?list=PLszfvPffJBpgyFFOuZxBZ6B-W9OJPxvCgH>

Crop by Crop Speed Share #1. Growers describe techniques used to grow a specific crop in 10 minutes—including seeding, bed prep, cover cropping, spacing, amending, cultivating, harvesting, and storage. Topics: arugula, cut flowers, baby lettuce, onions, and leeks with farmers Ryan Demarest (Naked Acre Farm), Jessie Witscher (Understory Farm), Ryan Fitzbeauchamp (Evening Song Farm), and Jon Cohen (Deep Meadow Farm), Genica Breitenbeck (Naked Acre/ Home Front Gardens)

Crop by Crop Speed Share #2. Growers describe techniques used to grow a specific crop in 10 minutes—including seeding, bed prep, cover cropping, spacing, amending, cultivating, harvesting, and storage.

Topics: Brussels sprouts and other brassicas, garlic, potatoes, , and delicata squash with farmers Andy Jones (Intervale Community Farm), Patrick Sullivan (Ananda Gardens), Rachel Stievater (UVM Catamount Farm), and Jake Kornfeld (The farm at VYCC), and Seth Bent (Mink Meadow Farm).

Diversified Farm Crop Pollination and the Common Pollinators. Spencer Hardy from the Vermont Center for Ecostudies and co-owner of The Farm Upstream and UVM Extension pollinator support specialist Laura Johnson describe some of the common pollinators responsible for marketable fruit set on your farm and how to support them. Pollination requirements, timing of flower and fruit development, pollen characteristics, and differences among common fruit and vegetable crops are described.

High Tunnel Pests, Old and New. UVM entomologist Cheryl Sullivan and UNH entomologist

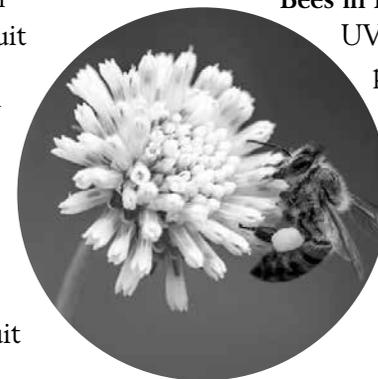
Anna Wallingford describe high tunnel pests and how to manage for them. They discuss aphids, cutworms, and other foes of your crops.

High Tunnel Ventilation. UVM Extension Agricultural Engineer Chris Callahan plus UVM Extension Vegetable Nutrient Management Specialist and high tunnel grower Becky Maden discuss high tunnel ventilation, including structural orientation, structural design, passive ventilation, mechanical ventilation, best practices for disease management, and NRCS funding available to support implementation.

Commercial Bumble Bees in High Tunnels.

UVM Extension pollinator support specialist Laura Johnson plus Koppert's Inside Sales Representative Anne-Marie Coleman and

Christa Alexander from Jericho Settlers Farm discuss bumble bee use in high tunnels for crop pollination, including colony biology, optimizing pollinator use from single/multi boxes.



Produce Safety Improvement Grants are back!

Applications are now open for 2023 projects.

Implement on-farm food safety practices, from pre-harvest to sale

Projects can address Produce Safety Rule requirements or meetmarket demands

Grants from \$5,000 to \$20,000 with no required match

LEARN MORE AT BIT.LY/VTPSIG23

VERMONT
PRODUCE
PROGRAM



CLASSIFIEDS

To place a classified ad in *Agriview* sign up to be a paid subscriber — visit our website: <https://agriculture.vermont.gov/administration/vaafm-news/agriview/advertising-agriview>

Email: Ag.agriview@vermont.gov, phone: 802-828-1619. Deadline for submissions is the 1st of each month for next month's issue. Example: January 1st deadline for February issue.

Cattle

Cow and calf pairs from closed Certified Organic herd. Mixed breeds, reasonable prices. 802-254-6982 (8)

DEXTERS for sale. 6 cows (open) 1 red, 2 dunn, 3 black, 3 steers. All dehorned. Animals are in great condition. Please call 802-356-5988 (Windsor County) (8)

Angus bull for sale, he is proven and 4 years old. Call for more info. 802-558-8196 (8)

Jersey cows available: closed herd in Highgate; Organic, grass-only, some A2A2, vaccinated, awaiting results of disease testing. 802-370-1051 (8)

Employment

Equipment Operator. Crop Production Assistant. CSA Coordinator & Wash Pack Manager. All positions with details at root5farm.com (5)

4 year old angus proven bull. Anyone interested can call me at 802-558-8196. (8)

For Agricultural Events and Resources Visit:

- The VT Agency of Agriculture Events Calendar: <https://agriculture.vermont.gov/calendar>
- UVM Extension Events Calendars: https://www.uvm.edu/extension/extension_event_calendars
- Vermont Farm to Plate Events Calendar: <https://www.vtfarmtoplate.com/events>
- Northeast Organic Farming Association of Vermont Events Calendar: <http://nofavt.org/events>
- DigIn Vermont Events Calendar: <https://www.diginvt.com/events/>
- Agricultural Water Quality Regulations: <http://agriculture.vermont.gov/water-quality/regulations>
- Agency of Ag's Tile Drain Report now available here: <http://agriculture.vermont.gov/tile-drainage>
- VAAFAM annual report available here: http://agriculture.vermont.gov/about_us/budgets_reports
- Farm First: Confidential help with personal or work-related issues. More info call: 1-877-493-6216 any-time day or night, or visit: www.farmfirst.org
- Vermont AgrAbility: Free service promoting success in agriculture for people with disabilities and their families. More info call 1-800-639-1522, email: info@vcil.org or visit: www.vcil.org.

For more agricultural events visit our *Funding Opportunities & Resources for Businesses* webpage at: http://agriculture.vermont.gov/producer_partner_resources/funding_opportunities

Equipment

1) Cheese Making Equipment: Copper Vat, 2 pile presses and micro perfs, including all the associated miscellanea required to make an award-winning alpine style cheese. Sold on site. 2) Bison Trail Hand Stock Trailer. Looks rough; Ostill tough, we need something bigger. Sold on site. North Pomfret, VT. info@ThistleHillFarm.com. 802-457-1884 (4)

4.5 ton grain bin, 6.5 ton grain bin, (2) 8 ton grain bins priced to sell. 38 John Deere hay elevator. 16 ft New Holland hay elevator. 802-624-0143. (5)

Meyers Snow plow 8'6" wide \$800. 7-yard dump body on INK Truck \$1500. 802-558-0166 (5)

Gehl 5640 skid steer-82 HP-2 speed -New Tires Has steel Tracks -2,675 hours. \$19,995 (5)

Horsepower Delaval vacuum pump, good shape. 3 Pt: 7 ft back blade. 8 ton grain bins, 32 ft John Deere hay elevator, 16 ft new holland hay elevator. 802-893-4683, 802-624-0143 (7)

Micro Cheeseplant Equipment: AlpineGlo Farm is looking to sell all cheese house contents as one package, this includes a 30 gallon pasteurizer. Real estate is not included in the sale. For a complete list of inventory and details please contact the farm directly. Located in Southern Vermont. Asking \$30,000 Contact Rachel Ware at rachel@alpineglofarm.com or (802) 463-2018 www.alpineglofarm.com (7)

60-gallon Upright Milkplan Bulk Tank \$3700 Semen Tank \$300 Pick Up Only, Killington VT Call 802-490-5712 (7)

Two tecumscac gasoline power tapers for tapping sugarbush. \$75 each or both for \$125. Both start and run great. Tap up to 150 taps on one tank gas. 802-291-4525. Call or text. Royalton. (8)



1 8ft snow blower \$2300. 1 5ft international snow blower \$1300. 802-624-0143

Equine

Trailer – 2 horse thorobred size, dressing room, ramp and tag along. 802-345-8026 (6)

6 stable available, indoor arena. Outdoor paddocks, do all work yourself and all feed. Slight fee for water & lights. 802-345-8026 (6)

General

Beautifully restored doctor's buggy and Irish Brougham coach. Call 802-451-6813 for photos & details. (8)

Hay, Feed & Forage

Certified Organic wrapped round bales for sale. approx 50% dry matter. Have forage sample results for 3rd cut, \$45,00/ 50.00 per bale depending on which hay is taken. Call or text 1-802-210-5279 (5)

4x5 round bales. Early 1st cut. 802-265-4566 (6)

4x4 Wrapped Round Bales, 1st cut 2022 for sale. \$45/bale 4x4 Dry Round Bales, \$50/bale 4x4 Wrapped Round Bales, 1st cut 2021 \$40/bale Pickup at the farm. 1710 Wild Apple Road, South Pomfret, 05067 Call Tom at 802-457-5834 (6)

Good Quality First cut netted large dry round bales, \$50 Excellent Quality First cut 9x200 ft Ag Bags of 2021 Haylage early cut Delivery available, David Leblanc 802-988-2959 or 802-274-2832 (6)

Organic round bales for sale. Well wrapped, tedded, June cut, 2022. Never wet; sweet smell. I load, you haul. \$35 at the farm. Easy access for trailer or truck. Thistle Hill Farm. N. Pomfret, VT info@ThistleHillFarm.com. (7)

Certified Organic Wrapped Round Bales for sale. All hay is tedded and feeds out like it's dry. 4.5' by 4' bales. Early and late 1st cut @ \$45/ bale. 2nd and 3rd cut @ \$55/bale. N. Danville 802-748-8461. (8)

CHITTENDEN COUNTY

June cut Hay, Never wet, 4' X 5' Round Bales, \$35/bale loaded, Cash/good check only, Westford, Ray @802-355-2930 (5)

FRANKLIN COUNTY

Good quality hay 1c & 2c from western US & Canada. Alfalfa orchard and orchard sweet grass. 18 to 20% plus protein. Large bales and organic by trailer loads. Large or small square bales of straw whole or processed at farm we load or direct delivery by trailer load. 802-849-6266 or 802-373-5217 (12)

RUTLAND COUNTY

Small square bales. First cut. 210 available at \$5 each. 802-773-8716 (6)

WASHINGTON COUNTY

Small square bales – 1st cut \$6.00 or less for quantity. 802-793-3511 (4)

Small square bales - 1st and 2nd cut; excellent quality.

continued on page 12

\$5/bale at the Paquet Farm, Barre 802-476-5082 (8)

Sheep & Goats

Now taking orders for our 2023 registered Alpine kids. Lazy Lady Farm, with 35 years of breeding experience will have doe and buck kids, from 30 does, available starting in March. We have a 2800# herd average with DHIA testing. We are CAE,CL and Johnes free with annual testing. Please visit our website: www.lazyladyfarm.com. for farm info and our sales list. 802-595-4473 laini@lazyladyfarm.com (6)

Ice House Farm dairy goat kids available. Disease free

herd. Saanen & Alpine lines averaging over 4,000 pounds of milk per season. Call 802-247-1443 (8)

Alpine kids \$200. CAE/CL/Johnes negative. ADGA top genetics. <http://www.sagefarmgoatdairy.com> Katie 802-461-9025 kpindell@gmail.com (8)

Wanted

A 1941 farm license plate with the prefix AGR. Also need a 1944 farm plate. Terry at 802-885-5405 (6)

Hay elevator in good working condition with motor 24' is perfect. Please email with pic and info. You can call

me Israel at 802-563-6061 Appreciated!! Email is Israel1@gmail.com (7)

Maltese pup or young dog 802-885-6450 (8)

Help Wanted year round on our organic livestock (Angus beef, pork, lamb) farm in N. Danville, Vt. Part time position consists of morning chores (7:30 am-10:30am) Monday thru Friday and every other weekend. Full time position possible for someone willing to do chores and who has experience with outdoor work (fencing, haying, logging) as well. We also would allow someone to use the farm to produce

for themselves and market through our on farm store (chicken, eggs, produce, etc). Pay depends on experience with entry level at \$15/hr. We would assist someone from out of town in finding rental housing. Email Vince Foy at badgerbrookmeats@gmail.com or call 802-748-8461. (8)

For Sale

Entire Micro Dairy and Cheese House For Sale: AlpineGlo Farm has been successfully making farmstead goat cheeses since 2016 in the Windham County area, and is looking to pass on the business locally as sales

outlets and a strong customer base are in place. This is an opportunity to step right into a functioning business. Inventory includes a herd of 13 ADGA Alpine Dairy Goats (10 currently due to kid in April), all milk parlor contents, and all cheese house contents including 30 gallon pasteurizer. Real estate is not included, this is to be set up on your property. For full details and inventory please contact the farm directly. Located in Southern Vermont (Westminster). Contact Rachel Ware at rachel@alpineglofarm.com or (802) 463-2018. PLEASE, serious inquiries only. (8)

Upcoming Grant Opportunities

The Agency of Agriculture, Food & Markets is pleased to be able to help you more easily identify upcoming grant opportunities. Please go to <https://agriculture.vermont.gov/grants/calendar> for more information.

Programs Open Year-Round

Farmstead Best Management Practices (BMP) Program

Technical and financial assistance for engineered conservation practices on Vermont farms.

Jenn LaValley

Jenn.LaValley@vermont.gov

802-828-2431

Pasture And Surface Water Fencing (PSWF) Program

Technical and financial assistance for pasture management and livestock exclusion from surface water on Vermont farms.

Mary Montour

Mary.Montour@vermont.gov

802-461-6087

Grassed Waterway and Filter Strip (GWFS) Program

Technical and financial assistance for implementing buffers and seeding down critical areas on VT farms.

Sonia Howlett

Sonia.Howlett@vermont.gov

802-522-4655

Conservation Reserve Enhancement Program (CREP)

Implementation costs of vegetated buffers and rental payments for maintained buffers on Vermont agricultural land.

Ben Gabos

Ben.Gabos@Vermont.gov

802-461-3814

Phil Wilson

Phillip.Wilson@vermont.gov

802-505-5378

April

Local Food Market Development Grants

Grants to help farm and food producers access local institutional and wholesale markets

Gina Clithero

Gina.Clithero@vermont.gov

802-585-6225

May

Farm Agronomic Practices (FAP) Program

Per-acre payments for conservation practices on Vermont farms and support for one-time water quality educational events or trainings

Nina Gage

Nina.Gage@vermont.gov

802-622-4098

The 56th Official Vermont Maple Festival in St. Albans is coming April 28th through April 30th this year

Fittingly, the theme is of this year's festival is "Maple: the Heart of Vermont". Let the Vermont Maple Festival launch you into the basics of maple and show you the many ways it can be used. 2022 was a remarkable year for syrup producers, and 2023 is looking great too, so let Vermont Maple delight your taste buds in 2023. Vermont Maple the official Flavor of Vermont! Many of the events at the Vermont Maple Festival in St. Albans are free of charge, and accessible for all. Overnight accommodations are available in St. Albans, Enosburg Falls, Colchester, and Burlington. Tap into all there is to SEE, LEARN, SAVOR and DO at the Vermont Maple Festival! Visit www.VTMapleFestival.org for more information.



Cover Crop Research in Vermont Part of a National Network

By Heather Darby and
Lindsey Ruhl, UVM Extension

Since 2020, University of Vermont Extension has been collaborating with 25 other states to conduct cover crop research as part of the Precision Sustainable Agriculture (PSA) on-farm network (<https://www.precisionustainableag.org/>). The network's research, conducted in partnership with 233 farms, is focused on evaluating the influence that various environments have on cover crop decomposition rates and the influence that cover crop has on soil, weed, and corn performance. The project is also testing new equipment that monitors soil temperature and moisture, estimates cover crop yields, and uses machine learning for weed identification.

Here's how it works: On each participating farm, farmers plant cover crops and leave two bare strips in their field (Image 1).

In the spring, right before cover crop termination, the UVM Extension Team collects cover crop biomass samples and puts them into mesh bags which lay on the ground and are allowed to decompose. (Image 2) Researchers pick up these bags throughout the year and evaluate them for the carbon, nitrogen, and decomposition rate of the cover crop. At this stage researchers also take measurements with new forage box technology to estimate cover crop yield.

After the corn crop has emerged, water and temperature sensors are installed in cover cropped and bare strips. The sensors are installed at five different depths: 30", 15", 4", 2" and on the surface. Each strand of sensors is connected to a node. The four nodes 'talk' to a gateway which transmits the data to the cloud and onto an online dashboard where researchers and farmers can view the data. Soil moisture and



Image 2: Decomposition bags measure the rate of cover crop decomposition while solar-powered sensors measure soil and water parameters. (Image: Precision Sustainable Agriculture network)

temperature data not only help us understand how the cover crops influence these soil parameters, but how these parameters also influence the decomposition of the cover crop over time

... and in turn influence crop yield.

Finally, every two weeks from corn planting until the corn has reached a height of 3 feet, weeds are recorded with a goPro to calibrate machine learning weed identification, density, and biomass.

We are now wrapping up our second year collecting data and testing new technologies. The data from farms all around the country are now making its way to researchers that are constructing real-time decision support tools (DSTs). These DSTs will eventually help the farmer predict the best time to terminate a cover crop to maximize cover value and

crop productivity. Farmers and technical service providers can access the free cover crop decision support tools through a QR code or the Northeast Cover Crop Council website: <https://northeastcovercrops.com/decision-tool/>



This work is supported by the Agriculture and Food Research Initiative's Sustainable Agricultural Systems Coordinated Agricultural Projects [award no. 2019-68012-29818] from the United States Department of Agriculture (USDA) National Institute of Food and Agriculture.



Image 1: Participating farmers leave bare test strips in their cover cropped fields to help evaluate the effects that cover crops have on soil and crop yield. (Image: UVM Extension)

Plant CSI: Solving Crimes With Plants

By Jodi Larison, UVM
Extension Master Gardener

Plant materials have been used to solve crimes on tele-vision shows, in books and in real life. The use of plant materials in solving crimes is called forensic botany. Plant materials that have been utilized in solving crimes have included flowers, fruits, leaves, pollen, seeds and wood.

In his book, *Fruits of the Poisonous Tree: A Joe Gunther Mystery*, Vermont author Archer Mayor's character Detective J.P. Tyler, when commenting on evidence from a crime scene, held up a small baggie with a tiny fragment of organic matter in it. As to this organic matter, he stated "It's Russian olive... not a rare plant... The point is, there ain't a single Russian olive on Gail's property."

Gail was the victim. Tyler also noted that he found "a Russian olive right in front of" a suspect's trailer.

While that's an example of plant CSI in fiction, one of the first and most famous cases solved using forensic botany was the 1932 kidnapping and murder of the Lindbergh baby. A homemade ladder used in the kidnapping was left behind at the scene.

The rings of a piece of wood in the ladder matched perfectly with the rings of a floorboard in the attic of Bruno Richard Hauptmann, according to Dr. Arthur Koehler, chief wood technologist at the Forest Products Laboratory in Madison, Wisconsin. The match was an exact match of the annual rings as well as their unique



pattern.

The defense team tried to disallow the forensic botany evidence, but the judge decreed that Koehler was an expert and allowed his testimony. Hauptmann was convicted with the testimony presented by the wood technologist key to his conviction.

The first-time plant DNA was used to get a conviction in a 1992 murder of a woman in Arizona. In this case, an investigator noticed that a Palo Verde tree near the victim's body had recently been scraped, possibly by

a vehicle. DNA in the seeds from the tree matched the DNA of seeds found in seed pods in the suspect's truck.

In both these cases, the plant material created botanical "fingerprints" that led to convictions.

Pollen also can act as a botanical fingerprint. For example, pollen might help identify a region where an event occurred or where a suspect has been. In some cases, DNA analysis actually can link a leaf to a single tree.

While the pollen of some plants is unique, this is not true for all plants. For example, grass pollen generally cannot be linked to specific plants or areas, but seeds and fragments of grass may have unique DNA. While not

technically a plant, algae also has aided in solving crimes.

Additionally, plant materials may provide clues as to the timing of an incident. In the 2011 trial of Casey Anthony, plant materials were used by the defense to refute the prosecution's timeline. In this case, a forensic botanist determined the duration of time that her daughter Caylee's body was in the woods, all based on the growth of the plants in and around her remains.

Forensic botanist Dr. Christopher Hardy, a professor at Millersburg University, has been cited as stating that forensic botany is an ideal investigative tool because it is always unbiased. So, the science of botany maybe more important than one might think when it comes to solving crimes.

Help Spot Spotted Lanternfly!



Thousands of Vermonters attended the Vermont Flower Show held March 3 – March 5. Agency staff spoke to visitors about pests to watch for and how to manage them.



Agency Contact Numbers

To help you find the right number for your question, please consult the list below. You are always welcome to call our main line 802-828-2430. We will do our best to route you to person most able to answer your question quickly and accurately.

Program Phone Numbers

Act 250	802-461-6798
Animal Health	802-828-2421
Business Development	802-828-1619
Dairy	802-828-2433
Enforcement: Water Quality or Pesticide	802-828-2431
Feed, Seed, Fertilizer & Lime	802-828-5050
Licensing & Registration	802-828-2436
Meat Inspection	802-828-2426
Produce Program	802-522-7811
VT Agriculture & Environmental Lab	802-585-6073
Water Quality BMP	802-828-3474
Water Quality Grants	802-622-4098
Water Quality Reports	802-272-0323
Weights & Measures	802-828-2433
Working Lands	802-917-2637

Vermont Dairy Farmers Recognized for High Quality Milk

Scott Waterman, VT Agency of Agriculture, Food & Markets

The Vermont Dairy Industry Association (VDIA), in partnership with the A. Pizzagalli Family Farm Fund, is pleased to announce the 2022 Vermont Milk Quality Awards. The awards recognize the dairy farmers who produced Vermont's best quality milk in 2022. These farmers were recognized recently at the annual Vermont Dairy Producers Conference, held for the first time in-person since the beginning of the pandemic.

The awards were presented to:

1st: \$2,500

Howmars Farm

The Gates Family
Franklin, VT

2nd: \$1,500

Essex Farm LLC

The Essex Family
Vergennes, VT

3rd: \$1,000

Dubois Farm Inc.

The Dubois Family
Vergennes, VT

"The VDIA loves to promote the excellent work of our Vermont dairy farmers. The results of their hard work and dedication can be seen on the landscape throughout our state and in the wonderful dairy products produced with their milk in the state and the region." said VDIA board member Amy Maxham "Vermont dairy farmers work hard year-



Award winners left to right, Howmar Farm (Winner), first runner up Essex Farm and second runner up Dubois Farm.

round to produce top quality milk and it is our privilege to recognize 3 Vermont farms for their exceptionally high quality. This level of quality is the result of year-round attention to detail, hard work and persistence."

This is the third year the A. Pizzagalli Family Farm Fund has provided a \$5K grant to support

the VDIA "Milk Quality Award" program. The grants are designed to encourage professionalism and quality in the industry and recognize dairy farmers for their daily hard work for Vermont. For many years, Angelo Pizzagalli has supported Vermont's working landscape and its farmers, recognizing the importance of this segment

of Vermont's economy and shared heritage. The three award winners were part of 58 dairy farmers from across the state who achieved the standards necessary to be nominated for the awards. All worked hard to achieve a quality of milk that was considered for this recognition.

"Quality is the

cornerstone of Vermont dairy," said Anson Tebbetts, Vermont Secretary of Agriculture. "It all begins with the care of the cow. Congratulations to our farmers who work day-and-night to deliver a quality product. We are grateful for the support of the Pizzagalli Family and their on-going commitment to excellence in Vermont Agriculture."

The Vermont Dairy Industry Association works for the mutual benefit of its members, dairy farm families, and the dairy industry, while encouraging and promoting close cooperation with educational institutions and other agencies concerned with the dairy industry. It also provides educational opportunities, facilitates networking, supports youth activities in dairy and recognizes excellence in the dairy industry. The milk of all nominees has met strict quality criteria.

Umatter® Suicide Prevention Awareness Training for the Agriculture Community

Members of the agricultural community are invited to join Farm First in this special training on suicide prevention. Participants will learn basic knowledge and skills of suicide prevention including societal myths and attitudes, use of sensitive language, risk factors and warning signs, protective factors, considerations for populations at risk, examples of what to say and do, and local and national resources for help. Participants use behavioral practice techniques to apply a three-step process for talking with someone who presents suicide risk. This Farm First adapted version focuses on

the agricultural community.

Built on the foundation of connection and conversation, Umatter® aims to enhance understanding of suicide risk and decrease the stigma of asking for help.

"You matter because you may need help. You matter because you may be able to help."

Wednesday, April 5th 10:30am – 12:30pm

In-person

Waterbury, Vermont

Register at: <https://farmfirst.org/events>

Governor Scott Celebrates Maple Season at Connor Maple Farm

By Scott Waterman, VT Agency of Agriculture, Food & Markets

Vermont Governor Phil Scott tapped a maple tree at the Connor Maple Farm in St. Albans today to recognize the beginning of the new maple season. The governor was joined by Mike and Joanne Connor and their family, Senator Peter Welch, Vermont Secretary of Agriculture Anson Tebbetts and a large contingent of area children, all excited to see the sap run and get a taste of Vermont's sweet season.

"I always look forward to this time of year when we can help celebrate Vermont's maple industry and families like the Connors," said Governor Scott. "They, and many Vermont maple farmers like them, make sure we're producing the

best maple syrup in the world. Their hard work and dedication are why we continue to lead the nation in maple production and quality."

The Connor Family has operated their maple syrup business since 2011. They have 9,000 taps in St. Albans Town that produces over 3,300 gallons of Vermont maple syrup each year. The family intends to continue the Vermont tradition of producing Pure Vermont Maple Syrup that has sustained Vermonters for centuries.

"Vermonters are known around the world for our maple syrup. It's essential to our state's economy and our culture. And it's a tradition that must be protected," said Senator Peter Welch. "From supporting Vermont sugar makers in the upcoming Farm Bill, to fighting climate change and protecting our environment, I'll do everything I can to keep Vermont's sugar making history alive."

The Vermont Agency of Agriculture, Food and Markets recognizes the importance of the state's maple industry to our economy and working lands culture. The Agency continues to work to support our producers with marketing programs like the Vermont Maple 100, labeling and product quality inspections and funding to support the Vermont Maple Sugarmaker's Association Sugarhouse Certification

Program.

"Vermont is the leading maple syrup producer in the nation because of families like the Connors," Agriculture Secretary Anson

Tebbetts said. "Last season, Vermont produced a record high 2.55 million gallons, up 46% from 2021. Vermont's 2021 value of production totaled \$56 million in sales,

making maple the second largest agricultural crop in Vermont behind milk and highlighting the importance of this industry to our state."



Governor Phil Scott tapping a tree.



Secretary Anson Tebbetts talking with a group of students at Connor Maple Farm.



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